

The Carolina Farmer

COVERING THE CAROLINAS FROM THE MOUNTAINS TO THE SEA

VOLUME II

MARCH, 1947

NUMBER 3





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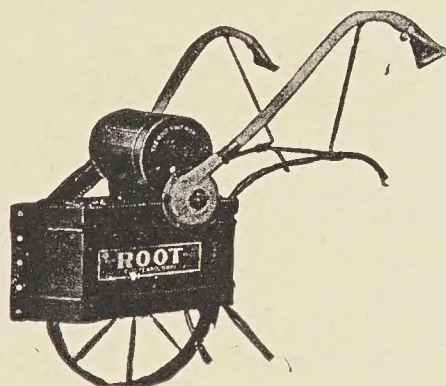
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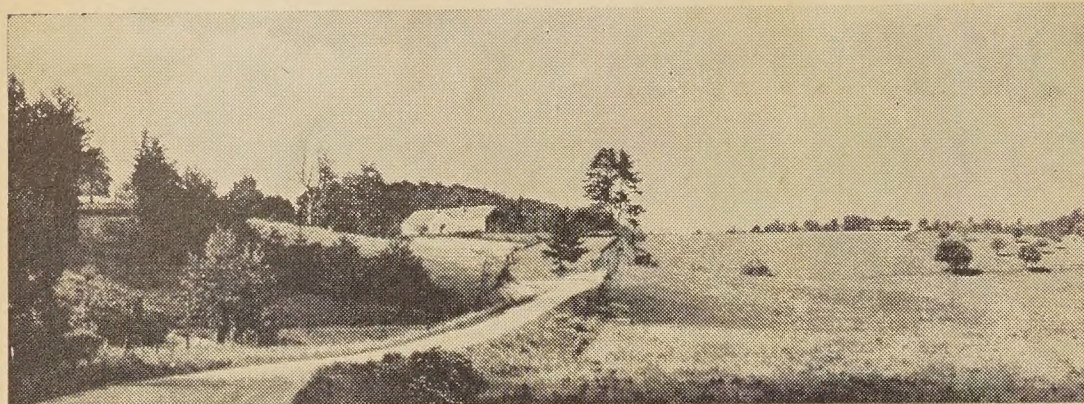
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Covering the Carolinas from the Mountains to the Sea



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OUR FRONT COVER

WORKMAN SOWING TURKISH TOBACCO SEEDS IN BED

The seeds are very small and usually mixed with sand or ashes so as to give better distribution over the bed.

Farm Facts

HOG GRAZING HELPS RELIEVE FEED CRISIS

"Now is the time as never before to extend the use of temporary grazing crops for hogs," said Dr. Roy Lovvorn, pasture specialist, at State College.

Lovvorn pointed out that having hogs on pasture is not only a sound management practice that has been recognized for years, but now offers a way to relieve the acute feed shortage and still grow quality meat.

Although it is too late to use some of the crops this summer it is never too late to plan for the future. The main crops recommended are listed as follows:

Soybeans: Any leafy variety, sown in narrow rows, is good. Use a bushel of seed per acre.

Lespedeza: While this is not the best grazing crop, it can be used to advantage except in dry periods.

Kudzu: A new plant for hog grazing and one that gives excellent results when properly used.

Alfalfa: This king of the hay crops is very satisfactory for hog grazing. It can be grown on any well drained soil, but due to its abundant growth must be fertilized heavily with lime, phosphate and potash.

Ladino Clover: Another new plant which makes an excellent growth suitable for forage. The seed are expensive, \$2.50 a pound, and 2-4 pounds per acre are necessary.

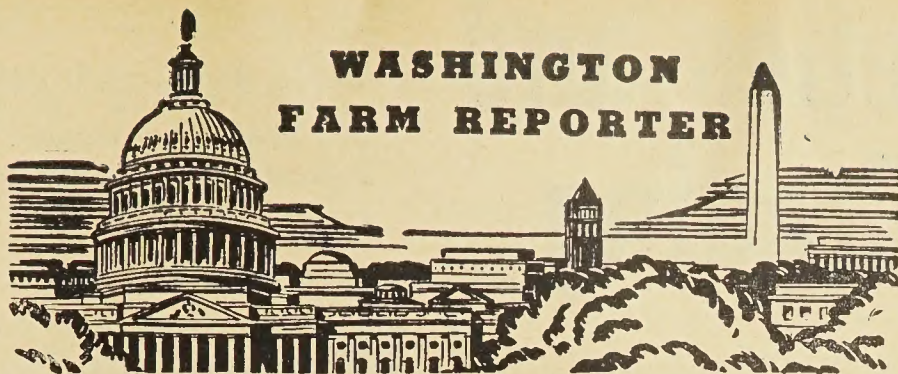
For winter grazing, rye grass and crimson clover are still the best we have. They should be sown early, seeded heavily, 15-20 pounds of clover and 25-30 pounds of rye grass per acre, and fertilized liberally.

Ancient Greeks gave 14 head of sheep for a pound of pepper. Before the war it cost about 4 cents a pound.

COMMON MANGE

Common mange or scabies is caused by a tiny whitish mite scarcely visible to the naked eye. It burrows into the skin, forming tunnels where it lives and lays its eggs. These mites irritate the hog and violent rubbing on rough surfaces is a good indication of the presence of these parasites. In later stages the skin becomes crusted, and wrinkles and cracks appear. The best control is lime-sulphur dip. Use 1 gallon of commercial liquid lime-sulphur to 15 gallons of water. However, 3 pounds of dry lime-sulphur may be used in place of a gallon of commercial liquid lime-sulphur. Lime-sulphur dips should be used at a temperature of 95 to 100 degrees Fahrenheit. Hold hogs in the dip until the scales are well soaked.

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Farm Machinery

With the steel strike delayed at least until May 1 and probably avoided, prospects are increasingly bright for farmers who want to buy new machinery this year.

Farm machinery manufacturers report their 1946 output was 35 per cent above 1941, the previous peacetime record year. Between 10 and 15 per cent of that was exported.

Production of nearly all types of farm machines now is at a record level. Manufacturers say that if production is not slowed down by strikes that the 1947 output will be considerably higher than in 1946.

Manufacturers expect demand to remain strong—and they don't like to discuss any possibility for a price reduction—due to accumulated demand and the necessity for further mechanization to offset high farm wage rates and continued shortage of workers.

Dairy Situation

The Agriculture Department expects some weakness in dairy prices and will study the possibility of floor prices under milk. It expects strong demand, however, to prevent a serious price slump.

Midwestern Congressmen have been pressing the Department for supports, but Eastern dairymen who talked with USDA officials last week fear that a floor price covering the mid-west would pull their prices down.

BAE economists in the USDA say that if industrial employment and wages remain at current levels, that dairymen will not face serious price troubles this year.

Because feed supplies are more abundant than a year ago, and prices slightly lower, the Department thinks milk production will be slightly above the 120 billion pounds produced last year.

Farm Labor

Farmers who have been asked to cultivate and harvest a record 357,000,000 acres of food, feed and fiber crops this year have reason to wonder whether the government program for assisting them in obtaining labor will be cut out from under them.

Last year the Labor Office of the Agriculture Department and the Extension Service provided labor in areas where it

was critically needed through a recruiting and placement program. That included approximately 75,000 foreign workers.

With domestic labor still short, farmers have again asked for that assistance in meeting 1947 production goals. Unless renewed by Congress, the present labor program expires on June 30.

A couple of weeks ago Rep. Clifford Hope (R., Kans.), Chairman of the House Agriculture Committee, introduced a bill to extend the present program for one year in view of the continued shortage of farm labor and the big production goals.

Last week members of the House Agriculture Committee, at the opening of hearings on Hope's bill, did about everything to witnesses but burn them at the stake. As hearings were recessed until this week a farmer representative described the outlook as "anything but bright."

More Smokers

Figures on 1946 tobacco consumption, in its various forms, provide some rather interesting data on the nicotine habits of Americans.

People are smoking more cigarettes and cigars, but chewing and dipping less. Pipe smoking is on the decrease.

Last year cigarette production reached the staggering total of 350 billion—more than 2,000 for every person in the country and an average of 120 more than in 1945.

The average American last year smoked 40 cigars, the greatest number since 1942.

Pipe tobacco, oddly enough, suffered from the national prosperity, dropping about 40 per cent from 1945. But, said the Department, if economic activity declines the consumption of smoking tobacco will increase.

Chewing tobacco production, which suffers from the same ailment as pipe tobacco, declined 10 per cent and snuff production was 9 per cent below last year.

Meat for Export

Secretary Anderson decided last week that meat supplies are sufficient to permit export of 115,000,000 pounds during the next two months. His allocations were the first for export in nearly a year.

Foreign buyers, however, will have to make their own purchases arrangements

through regular commercial channels. During the war and immediately afterward, the Department purchased for foreign governments.

Great Britain gets the largest piece of exports, 25 million pounds, with France getting 23 million pounds. Belgium was allocated 16.5 million pounds and the Netherland Colonies, 14.5 million.

Allocations followed official USDA reports predicting 1947 meat production of 23 billion pounds, an increase of one billion pounds over last year and 5 billion pounds over the 1937-41 average.

The per capita meat production is estimated at 160 pounds, with domestic consumption taking 150 pounds of that. This, however, would be considerably below the 1944 peak meat production of 178 pounds.

The increased meat output will be in beef, which may set a new record. A near record number of cattle are expected to reach market during the next 9 months. Hog slaughter is expected to be below last year, however.

Sheep and lambs on feed are estimated at 6 million head, a decline of 700,000 from a year ago.

The Bureau of Agricultural Economics, in a "situation" report, sums up the outlook as follows:

Top grade cattle prices will decline slightly this year from current levels. However, prices of stocker and feeder cattle will continue "relatively high" due to seasonally small supplies.

The prospective small supply of fed lambs for the spring months should cause prices of slaughter lambs to advance seasonally through the spring, but decline next summer and fall.

Seasonal reduction in pork supplies during the spring and summer will be a strong support for hog prices. But, hog prices are not expected to go much above current levels due to larger supplies of beef.

Farm Meeting

The second post-war meeting of the officers and executive committee of the major farm organizations tentatively has been set for the week of April 6-12.

The first meeting, held last October in Buffalo, N. Y., resulted in substantial agreement on most major problems facing farmers.

The Buffalo meeting was attended by representatives of the National Grange, The American Farm Bureau Federation and the National Council of Farmer Cooperatives.

The Farmers' Union, which was not represented at Buffalo, has been invited to the April meeting here. The development of a post-war farm program is expected to draw major attention of the farm organization executives.

Tobacco Varieties and Research in Grading

By E. G. MOSS

Senior Agronomist
Oxford Tobacco Experiment
Station

BACK in 1932, James F. Bullock, Associate Agronomist, Bureau of Plant Industry, U. S. Department of Agriculture, selected from a farmer's plant bed near Oxford, N. C., plants that made a very vigorous growth. The type and quality were well fixed. Since the farmer did not know the name of the variety, it was designated at the Tobacco Station as No. 400. It has been known by that number until this day. This 400 is a heavier yielder of good cigarette tobacco and has meant additional millions of dollars to the growers of the State since the discovery. It is resistant to black root rot.

In 1935 the 400 tobacco was crossed on Cash tobacco at the Oxford Station by Bullock. The results of this crossing was the No. 401 tobacco. No. 401 is resistant to the leaf spot diseases, and is a heavy yielder and produces a larger percentage of good lugs. Like its parent, 400, it has greatly increased the per acre income.

The cross of 400 on Jamaica Wrapper made in 1935 by Bullock and by careful selection under my direction, developed what is now known as the 402 tobacco. No. 402 is now planted on something like 30 per cent of all the tobacco farms in the flue-cured belts. It is a larger producer of cigarette tobacco than either 400 or 401. It will average about \$50 more income per acre than most of the varieties commonly grown. It would be extremely difficult to estimate its value to North Carolina farmers.

For about 30 years farmers of the Middle Tobacco Belt lost an increasing number of acres of tobacco because of the dreaded disease known as Granville wilt. It was estimated that this disease destroyed about 50,000 acres annually from 1935 to 1943. Try to estimate this in terms of dollars and cents, and you will run into the millions of dollars for the crop alone, to say nothing of losses in real estate values and taxes to both the Federal and State governments.

The United States Department of Agriculture, through one of its Senior Pathologists, Dr. E. E. Clayton, introduced into North Carolina at Oxford an imported tobacco known as 448A. This tobacco has resistance to Granville wilt, but it lacked

the quality necessary for cigarette tobacco. Dr. T. E. Smith, Associate Pathologist, U. S. D. A., and the North Carolina Experiment Station, by careful breeding and selection, and by testing on highly infested farms in areas near Creedmoor, N. C., developed the famous Oxford 26. Besides its resistance to Granville wilt, Oxford 26 is tops in quality. It is one of the best cigarette tobaccos. This tobacco has put back into production more than 50,000 acres and has been the means of paying off mortgages on many homes. Its worth to North Carolina simply cannot be evaluated.

Since Granville wilt is spreading, more and more farmers are finding that they would have to go out of the tobacco production business if it were not for the work done at Oxford by the staff of the Tobacco Station in cooperation with the United States Department of Agriculture and the State agencies.

Work of the same nature was done by James F. Bullock on black shank with gratifying results. Consequently, we have Oxford Nos. 1, 2 and 3, highly resistant strains to the disease.

Dr. G. B. Lucas of the North Carolina Experiment Station staff is now located at the Tobacco Station in Oxford working on black root rot and other root diseases.

The most alarming need at the present time is a variety of tobacco resistant to two or more of the diseases. Can you imagine what might happen to a farmer if two of the dreaded diseases were to appear in the same field? Such is already the case in some sections. The research work must go on.

The Tobacco Station at Oxford, N. C., cooperating with Duke University, and under the leadership of Dr. P. M. Gross and Dr. F. R. Darks of the Duke faculty and Dr. F. A. Wolf, botanist and plant breeder, also of the Duke faculty, has developed strains of Turkish tobacco that yield more pounds per acre and are superior in aromatic qualities to those tobaccos grown in the Mediterranean countries. These Turkish strains are now being grown in western North Carolina counties. Turkish provides a new source of income for those



E. G. Moss (left) of the Tobacco Branch Experiment Station at Oxford, N. C., and W. P. Hedrick (right) of the Markets Division of the North Carolina Department of Agriculture, examine a leaf of the crop that brings in 55 per cent of the state's farm income.

farmers. Who knows how soon this may run into the millions? Millions of dollars worth is now being imported from foreign countries. It is not surprising that under the leadership provided by Duke University our methods of production and qualities of strains have attained such a high standard that the Turks are endeavoring to send students to Oxford to study methods practiced here.

Most of the efforts in research have been along the lines that would tend to satisfy the most urgent needs of the farmer. However, one phase that needs immediate attention is that of curing. Curing problems have not been overlooked. In 1946 the U. S. Department of Agriculture sent to the Tobacco Station at Oxford, N. C., Dr. O. A. Brown, a specialist in the field of agricultural engineering. Co-operating with Dr. Brown is N. W. Weldon, a specialist in tobacco and Assistant Superintendent of the Tobacco Station. His work is now progressing in research in curing tobacco.

Heat is required to cure tobacco leaves. It may be furnished by wood, coal, oil, gas or electricity. The purpose of a tobacco barn is to retain the heat so that it can be brought to the tobacco leaves in the right quantity and at the proper rate to cure them the lemon yellow color which means so much to the tobacco farmer.

It is possible to cure a stick of tobacco for each pound of coal burned or to cure ten sticks of tobacco for each gallon of oil burned. To ac-

(Continued on Page 22)

Compulsory meat grading went out with the removal of price controls. Now U. S. grades will appear on meats only if packers request them, as many did in pre-war years. Here is a brief refresher course on meat grades.

Meat Grading

It's All Meat

Before the characteristics of the various grades are described, there is one important thing to remember: There is no material difference in the nutritional value of different grades and cuts of lean beef. You can get just as much protein, just as many minerals and vitamins, out of pot roast as from porterhouse. Lean meat is lean meat. Low grades take more cooking time, high grades take more money. Which do you have most of?

Many delicious dishes are made from the less aristocratic cuts, and smart housewives will buy grades that fit their pocketbooks and time schedules best.

Now for the Grades

U. S. grade names are imprinted on the meat with a roller stamp which leaves a purple, ribbonlike mark the entire length of the carcass. Incidentally, the purple is a harmless vegetable dye which usually disappears during cooking. Most retail cuts should show at least a part of the grade stamp.

Here are the grades for beef and what they mean:

U. S. Prime—This is the highest grade of beef obtainable. The quantity is very limited and is used largely by exclusive hotels, restaurants, clubs, etc. Most consumers consider

beef of this grade to be uneconomical because of the abundance of fat. The lean is very firm and velvety in appearance; the fat is usually white and very firm and brittle, and the marbling (intermingling of fat within the lean) is very extensive and uniform.

U. S. Choice—This is the highest grade commonly found in retail shops. Meat labeled "Choice" is smooth and velvety in appearance. The lean is bright and may range from pale to deep red in color, with marbling which is readily apparent throughout the lean. The fat covering is moderately thick, white, or creamy white in color.

U. S. Good—The lean is moderately smooth and velvety, light to dark red with some marbling. It usually has a slightly thinner covering of fat than "Choice," and the fat may show a yellowish tinge.

U. S. Commercial—The lean may be somewhat soft and watery or slightly coarse. The color of the lean may vary from light to dark red, but there is practically no marbling. The fat covering is usually thin, and may be slightly yellow and soft. This grade gives good results when cooked in moist heat, as for a pot roast or stew.

(Continued on Page 22)

It was producers, not consumers, who first called for uniform standards for grades of dressed beef. By the turn of the century cattle trading and meat buying were on such a national scale that ranchers, traders, and buyers all felt the need of a standard terminology for referring to various degrees of excellence in cattle and beef. They needed terms that meant the same thing to the ranchers in the Southwest, packers in Chicago, and buyers from all over the country.

The University of Illinois undertook to make a study of these terms and in 1902 published its findings in a bulletin. In 1916, the U. S. Department of Agriculture, making much use of the Illinois publication, set up the first Federal tentative grade standards for market classes and grades of beef. These were not intended as quality grades for consumers but were prepared at the urgent request of industry for volume and price information from a neutral source. This was the beginning of market news reporting.

During the first World War these standards were used in the selection of meat for the armed forces and for our Allies. Soon after the war, commercial concerns, hotels, steamship lines, and restaurants began to specify by their purchase orders beef which met the U. S. standards. It was not long before tentative grade standards for lamb, mutton, and veal were also formulated.

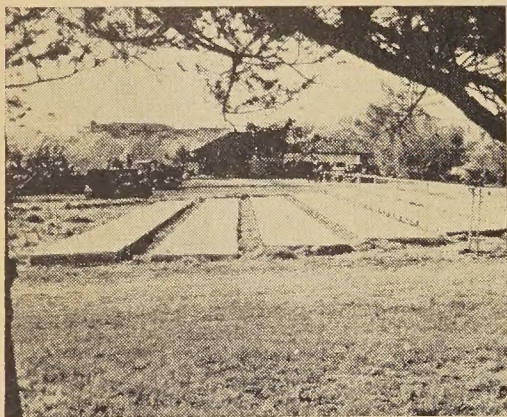
It was 10 years later, 1926, that as a result of hearings, the grade standards for beef were revised and officially promulgated by the Secretary of Agriculture.

On the morning of May 2, 1927, packing plants in seven of our large cities opened their doors to meat graders of the U. S. Department of Agriculture who had come at the company's invitation to grade and stamp the meat. That was the real beginning of quality grading as we know it. At first only the Prime and Choice grades were graded. A year later "Good" was added to the list, and before so very long the service included all grades of beef, veal, lamb, and mutton.

BEST WAY TO COOK MEAT CUTS

CUT	USE
Low-cost cuts:	
Shank (including bone) -----	Soup, stew
Navel -----	Stew, boiling meat
Thick plate -----	Stew, boiling meat
Corner piece -----	Pot roast
Brisket, fresh or corned -----	Boiling meat, stew
Fore shank -----	Soup, stew
Neck -----	Stew, mincemeat, meat loaf
Medium-cost cuts:	
Heel of round -----	Stew, pot roast
Prime rib, 8 ribs: B. Blade roast, 2 ribs -----	Roast
Top chuck -----	Pot roast, stew
Boneless rump -----	Pot roast, corned
Round -----	Minute steak, Swiss steak, pot roast, stew
Top sirloin -----	Pot roast, roast
Flank -----	Braised steak, stew
Chuck -----	Pot roast, stew
Cross rib -----	Pot roast
High-cost cuts:	
Sirloin -----	Broiled steak, roast
Porterhouse -----	Broiled steak
Prime rib, 8 ribs: A. Prime rib roast, 6 ribs -----	Roast
Other edible parts:	
Heart -----	Stew, stuffed, braised
Kidney -----	Stew, meat pie
Liver -----	Fried, braised, liver loaf, liver paste
Tongue, fresh, corned, pickled, smoked -----	Boiled
Tripe, fresh, pickled -----	Broiled, fried, creamed
Oxtail -----	Stew, braised, soup

THE plant which has been called by many a pernicious weed, the scent of which once annoyed the fair sex, the use of which was at one time sufficient to banish the user from society's best circles, has in time become not only an adjunct to good taste socially but one of the nation's leading domestic and foreign trade products. Tobacco has become so popular either for smoking or chewing, or as snuff, that markets in this country handle millions upon millions of



Model tobacco seed beds at the Agricultural Experiment Station at Clemson, S. C. Tobacco cloth is kept over the beds during the months of March and April.

pounds annually. One man, who used this little plant of the genus *Nicotiana* primarily to amass a great fortune, established Duke University and many other philanthropic movements for the good of mankind, while another man, who used it in all its known forms for personal satisfaction only, said, "If you'll tell me any other way to take it, I'll give you five dollars!"

Tobacco is said to have been introduced into the Old Country by a Spanish doctor in 1558. It is recorded that Columbus found the Indians smoking this strange weed when he landed in the West Indies in 1492; that the Spanish found the Aztecs using it when they came into Mexico; and that Cartier noted the use of it by the Indians in Canada when he landed in that country. The first cultivation of it in America was at Jamestown, Virginia, in 1612. James Rolfe is said to have brought the seed from South America, and to have developed within the space of seven years a domestic and foreign trade amounting to the exportation of about 20,000 pounds annually.

History states that "The American had evolved methods of cultivating tobacco and preparing it in all forms which are now used." This was a true statement until about 30 years ago when the tobacco industry started blending its domestic brands with Turkish to make the modern American cigarette. America has developed

TURKISH

the domestic bright and burley tobaccos to add to her list of achievements (eighty to one hundred years ago), but she has never been able to evolve methods of growing and preparing any type of aromatic tobacco which was acceptable to the blending process. These types of leaf had to be imported from Turkey, Greece, Bulgaria and Soviet Russia; amounting now to something like seventy-five million pounds each year. America, they said, couldn't grow an aromatic tobacco of this type. It had been tried before World War I in California by interested people, through funds supplied by the industry itself, but had resulted in failure.

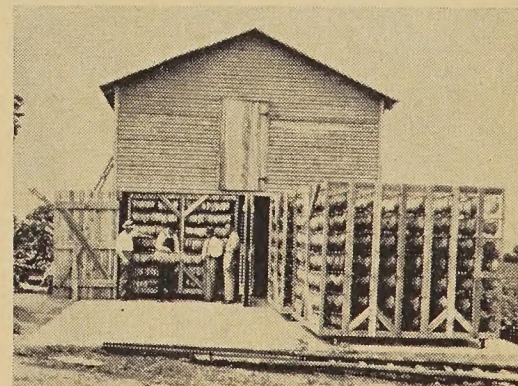
During the past few years, through the diligent and persistent efforts of Duke scientists, including Dr. Paul M. Gross, Dr. F. R. Darkis, and Dr. F. A. Wolf, the Duke laboratories have proven conclusively that a high quality of aromatic Oriental leaf, said to be as good if not better than that grown throughout the Mediterranean and Black Seas areas, can be produced under the soil and climatic conditions prevailing in large areas of the upper Piedmont region of the Southeastern United States. If the extensive field trials by farmers continue to be as successful as during the past several years, there is reason to hope that a new cash crop of great economic importance can be introduced on a commercial basis in this region. These scientists were supported by others from the experiment stations in three states, North Carolina, South Carolina, and Virginia, by such agencies as the General Education Board, and by help from four of the large tobacco companies.

The possibility of cultivating Turkish tobacco in America was discussed by some of the Duke scientists as far back as 1925, but at that time there were no adequate means or funds at hand. Due to the pressure of other research, the project was not actually initiated until 1939, when Doctors Gross, Darkis, and Wolf set about to get the seeds through friends in various sections of the world who could get them from the Mediterranean area. The first year seeds taken from 26 samples were successfully germinated at the experiment station in Oxford, N. C., and at Chatham, Va. They were transplanted from the seed bed to the previously

prepared soil of the field, about three and one-half acres, numbering approximately fifty thousand plants to the acre.

Dr. Darkis of the Department of Chemistry was in charge of the Turkish tobacco experimental laboratory and field research, which involved the responsibility of coordinating the project between the participating agencies and individuals. Dr. Wolf of the Duke Department of Botany was in charge of the breeding and genetic experiments. The program as a whole was under the general direction of Dr. Gross, chairman of the Department of Chemistry.

Dr. E. G. Moss of the Oxford tobacco experiment station, who was one of the key men in the program of developing Turkish tobacco in this country, was assisted by Commissioner of Agriculture Kerr Scott and Mr. Fred Miller, director of the State Farms. Dr. Moss made available the facilities for carrying on most of the agronomic program. In Virginia the work was carried on at the Chatham Experiment Station under the direction of E. M. Mathews who had long been interested in the possibility of producing Turkish tobacco in this country and who had made trial plantings in that locality before the inception of the program undertaken in 1939. The subsequent development of this work in Virginia was made possible by the support of Dr. A. W. Drinkard, Jr., then director of the Virginia Experiment Station, and of Dr. T. B. Hutchinson, agronomist for the Virginia Experiment Station. The work of recent years has been ex-



Shown above is a modern combination curing and storage barn, with concrete platform in front. The racks are kept on the white concrete, which reflects the rays of the sun during the day, and are placed in the barn at night. The second level is used for storage.

TOBACCO

By LUCILE K. BOYDEN

tended to include work in South Carolina through the cooperation of H. A. McGee, G. H. Griffin, and J. A. Martin.

But the Duke investigators admit that their first year's crop of Turkish tobacco was pretty poor. They were not familiar with this new type of plant nor the methods under which it should be grown. They were not willing, however, on grounds of the initial failure, to abandon the idea.

than most crops. The largest part of the labor is required during the period of harvest, due to the fact that the leaves are taken off the plant as they mature. Priming begins with the lower leaves, progressing toward the top of the stalk. Leaves of Turkish tobacco are harvested when they are much greener than those of flue-cured tobacco, making six to nine primings at intervals of five to nine days necessary.



Farmer and his wife string the leaves of tobacco on special needles to be put on sticks and placed on the racks as shown in background. The tobacco is cured by the sun.

In 1941, instead of three and one-half acres, they put in five acres, with the determination to try all over again.

Few people who use tobacco realize the amount of labor and careful supervision required in cultivation, especially in the growing of Turkish tobacco, which is produced under conditions differing greatly from those of the familiar flue-cured tobacco of the Southeastern region. Turkish tobacco plants must be handled with extreme care and definite method from the time of germination to harvesting which is done by the "priming" method. It requires more hand labor for its successful production

A soil with a clay base with some admixture of sand, small gravel, and broken rock fragments is most suitable to the growth of Turkish tobacco. The better quality of aromatic tobaccos is produced on relatively poor soils or those of the intermediate type so far as the natural productivity is concerned. Rich soils are not suitable, nor are the low, flat areas. The best ground is on a slope, perhaps near the crest of the slope, and the fertilizer used for the most part is stable manure. The plants are set very close together, from five to six inches apart, in rows that are twenty inches apart. To produce the best

Turkish tobacco it is absolutely necessary to produce small leaves, which is best accomplished by close spacing and by putting sixty thousand plants to the acre, perhaps seventy thousand, the crowded condition increasing the quantity and quality of the tobacco.

Turkish tobacco stalks are usually two or three feet in height, the bottom leaves maturing first, about forty to fifty days after the seedlings have been transplanted. These aromatic types of tobacco are not topped. The leaves are taken from the plant as they mature by persons called "primers," who place them in boxes or baskets in careful, straight arrangement. The leaves should never be allowed to stick together or become bruised, as it greatly reduces the quality. It has been found that the aroma of tobacco is contained in the hairs on the leaf, a fair correlation being found between the number of hairs on a given area of the leaf's surface and the level of aroma in the tobacco.

As the leaves are gathered they are laid out on tables where the "stringers" take over the job of placing them on fourteen-inch, flat steel needles, about seventy-five leaves to the needle. As each needle is filled, the leaves are slipped onto a small, strong polished twine about six feet long. Two needlefuls, about 150 to 250 leaves, constitute one stick of tobacco. The twine is looped on each end of a long, well-seasoned stick about five feet long. An important operation of the curing process is the spreading and spacing of the leaves on the string and on the pole. Unless the air can pass freely among the leaves they will sweat and pole-burn, the later causing condensation of moisture on the leaves, in the end rendering them entirely worthless.

After the tobacco has been strung it is placed on wilting racks out of the sunlight and out of direct currents of air. It takes approximately thirty-six to seventy-two hours for it to wilt, during which time starch is converted into sugar and a large part of the insoluble nitrogen is converted into the soluble forms. When it has been wilted it is placed on specially constructed racks and left out in the sun during the day. The racks are carried into the buildings at night.

Adequate building space is essential to the operations of producing Turkish tobacco. To grow successfully one-fourth of an acre, a farmer must have at least two hundred square feet of floor space in a garage, barn or machine shed, and it must be water-proof and weather-proof. Aromatic tobaccos are very susceptible to mold. Any moisture from the

(Continued on Page 23)

Power Farming Pays Off

THREE miles southeast of Gold Hill, N. C., five brothers, Glenn, 35; James, 25; O. S., Jr., 22; Tracy, 20; and Leonard Culp, 18, have perfected farm mechanization and teamwork to the "n-th" degree and are now successfully handling an 800-acre farm in Cabarrus County. After their father, an acclaimed master farmer, died in an automobile accident 15 years ago, these five boys and their mother, Mrs. Florence Culp, pooled their efforts in order to maintain the farm their father was so proud of. At that time they had 131 acres to work. Today this ambitious family owns 500 acres and rents an additional 300.

Besides farming their own land, the Culp family combine thousands of bushels of grain and seed for neighbors, do custom corn picking and plowing with their five tractors, and recently they acquired a bulldozer with which they are doing expert jobs of lawn grading and filling in neighboring counties.

Eighteen-year-old Leonard Culp's machine shop, situated in back of the Culp home, deserves much of the credit for the family's success. The shop recently won Leonard the State Future Farmers of America \$100 prize for the best boy's farm shop in the state. It is equipped with a welding outfit and just about everything else in the way of machine tools necessary to maintain a modern mechanized farm. Although Leonard is regarded as the family machinist, the rest of the boys are all proficient mechanics who help keep the family's many pieces of farm machinery in first-class condition.

For example, they have one of the first rubber-tired tractors sold in Rowan County and the boys are now putting the sixth engine into it. The Culp family have one of the first corn pickers sold in their neighborhood, and although it has picked 2,500 acres of corn it is still going strong. Their old pick-up hay baler has baled over 300,000 bales. They also have two All-Crop Harvesters, two side delivery rakes, a manure spreader, a manure loader, plows, cultivators and other machinery to use with their

five wheel tractors. Obviously, winter-time repair work is a big business on the Culp ranch.

In 1946, the Culp boys and their machinery harvested more than 8,000 tons of hay, in addition to 30,000 pounds of Lespedeza seeds, 7,000 bushels of small grains, and 2,000 bushels of corn.

Aside from their agricultural pursuits, the Culp family developed several skills which served to provide homes for three of the boys who are now married. They did their own carpentry, masonry, wiring, plumbing, and painting on each of the houses built for Glenn, James, and O. S., Jr.

The cooperation and effort displayed by this industrious family is an inspiration and example to farmers everywhere. They have clearly demonstrated that mechanized farming is the secret to greater yields, but not without hard work and zealous spirits.

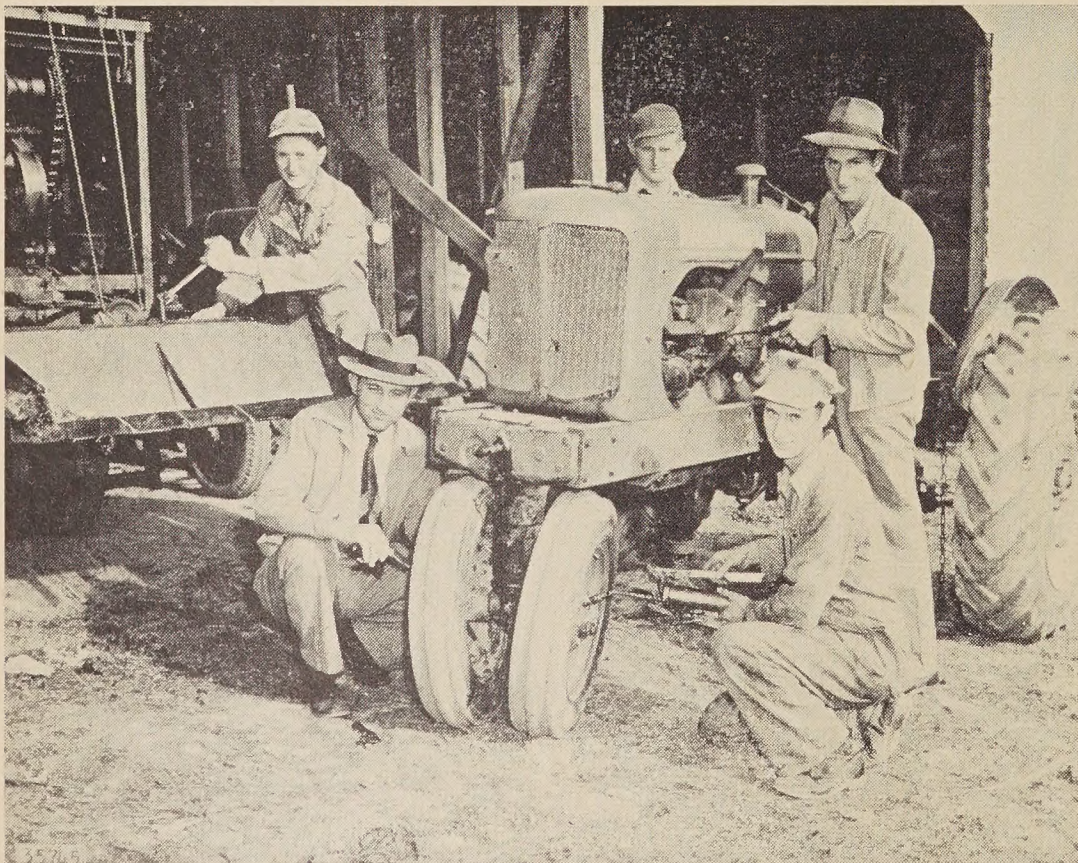
Make Farm Machinery Safe

Predicting that new farm machinery will continue to be hard to get in 1947, Prof. David S. Weaver, head of the Agricultural Engineering Department, State College, says it is highly important that Tar Heel farmers get their present equipment in shape for this year's work.

"Farm machinery that is poorly conditioned reduces an operator's alertness, is irritating and fatiguing, and fosters carelessness," Prof. Weaver maintains, pointing out that timely servicing of all farm equipment before field work starts will reduce accidents as well as costly field break-downs.

For safety's sake, farm machinery repair should begin with a thorough check, he says, citing the National Safety Council's reminder list of things that should be gone over. They include hitches, seats, clutches, wheels, brakes, steering, and unguarded parts such as gears, chains, shafts, fuel lines, and wiring. Leaky fuel lines or hazardous wiring can easily lead to a disastrous fire. Trash and grease should be removed from platforms, pedals, foot rests, or steps if safe footing is to be assured during operation.

An alarming number of accidents occur each year from home-made labor-saving equipment, Prof. Weaver says, advising that special care be taken in checking such equipment.



Glenn and O. S. Culp, Jr. (left to right, front), and Tracy, Leonard, and James Culp (left to right, rear), help tune up an Allis-Chalmers WC. These five unofficial master farmers farmed 800 acres in 1946 and worked away from home at custom work a third of the time.

PRECIOUS PROMISES

By REV. EDGAR M. HALL

TEXT:

"Exceeding great and precious promises." (2 Peter 1:4).

THE Bible is a mine of precious promises and many of them are unfulfilled in our Christian experiences because we will not turn the golden key of Faith in the Wards of Promise. Christ cannot do mighty works because of unbelief. Note, St. Peter calls these "precious promises." Gold is called precious metal because it has supreme value. A teacher asked her class the meaning of the word "precious," which occurred in the lesson, and one little girl answered, "Papa said the other day, Mamma was precious, because we could not do without her."

An English lady in poor circumstances had a son in America doing well financially, who wrote to her regularly and always enclosed an American bank note. A friend said to her one day, "Does your son ever send you any money?" "No," replied the mother, "but in every letter he sends me a pretty picture card."

"May I see one of them?" the friend asked. Opening the family Bible crowded with the "picture cards," she handed the friend one, only to discover the "cards" were banknotes of value. She was rich and did not know it. That is our condition!

"In quietness and confidence is your strength." This is a higher stage than when by work or self-denial we thought to win God's favor. "Be still and know that I am God" is a hard lesson, but it implies trust and confidence. Our children could teach us many lessons by their confiding faith in us. They believe in us as the source of all they need. They trust our protecting care and provision for their needs. "Except ye be converted, and become as little children, ye shall not enter into the kingdom of heaven." (Matt. 18:3).

Faith appropriates the promises. "Trust yourself to Him, and trust Him to keep you trusting." Nourish your faith by meditation on the promises. Two things are to be kept in mind: who it is that promises, and His ability to perform His part; and that the promises are conditional on our part. "He will give grace and glory and no good thing will He withhold from them that walk uprightly." "All things work together for good to them that love God." There is no promise for an easy, pleasant



way, but "grace sufficient" for every burden and trying experience. We may not always have light on our path, but His presence is guaranteed, even in the dark. "I would rather walk with Him in the dark than go alone in the light." We may have fiery trials, but the fire will not burn nor will our garments smell of smoke.

"Let not your heart be troubled, neither let it be afraid—I will be with you always even unto the end of the age." I believe in a physician and I commit my body to his care in illness. I believe in a lawyer and I trust my legal matters to him. I believe in a banker and let him keep my money. I believe in a train-crew when I take a journey. I believe in Jesus Christ as my Savior and I commit my body and soul and all my interests to Him. It is the same kind

of faith in each, only that His divine being makes the supreme difference. Do you take Him by faith to be what He reveals Himself to be? That is believing on Him. Then there is no case against you. You are accepted—free.

"And it shall come to pass that before they call, I will answer, and while they are yet speaking, I will hear." (Isa. 65:24).

"If two of you shall agree on earth as touching anything that they shall ask, it shall be done for them of my Father which is in heaven." (Matt. 18:19).

"Whatsoever ye shall ask in My Name, that will I do, that the Father may be glorified in the Son." (John 14:13).

"If we ask anything according to His will, He heareth us." (I John 5:14).

"If My people which are called by My Name, shall humble themselves, and pray, and seek My Face, and turn from their wicked ways; then will I hear from heaven, and will forgive their sin and will heal their land." (II Chron. 7:14).

On one occasion Bishop Joseph F. Berry was walking along a city street when he saw a small street-urchin dressed in a suit of clothes much too large for him, and an oversized hat, gazing longingly at a fruit stand. The bishop decided to treat him. Approaching the boy, he said, "What would you say if I told you you could have all the fruit you could eat if I paid for it?" The boy looked him over and walked away. He lived by his wits and was not to be fooled, was his thought. But the bishop pursued him and brought him back and asked the dealer if he would let the boy have what he could eat. He agreed, and the boy looked up and said, "It is awful good but you don't mean it." Then he filled his pockets and the lining of his loose coat, and the hat, and put an orange under each arm. He was a laughable sight as he walked away, smiling at the bishop whom he had slightly "tricked." The bishop said it cost him over \$3, but he learned a wonderful lesson. God has offered riches untold through the promises of the Bible and we, like the street-urchin, have said, in action if not in so many words, "It is awfully good, but you don't mean it."

GARDEN GUIDE

VEGETABLES	Time to Plant	How to Plant	Cover Seed Inches	Thin or Transplant	Mature in Weeks	Seed for 100 ft. Row
ASPARAGUS	Jan.-March	Cold frame	One inch	Twenty-four inches.	104	2 pkts.
BUSH BEANS	March-May	Drills 18 to 36 inches apart.	Two inches	Three to four inches.	6 to 7	1 lb.
POLE BEANS	March-May	Hills 2 feet apart.	Two inches	Three to hill	7 to 8	½ lb.
LIMA BEANS	March-May	Drills 18 to 36 inches apart.	Two inches	Six inches	7 to 9	1 lb.
BEETS	Jan.-March June-July	Drills 18 to 36 inches apart.	One inch	Four inches	6 to 8	1 oz.
BROCCOLI	June-July	Cold frame and transplant.	One-half inch	Fifteen inches	8 to 12	2 pkts.
BRUS. SPROUTS	Jan.-March June-July	Cold frame and transplant.	One-half inch	Fifteen inches	8 to 12	2 pkts.
CABBAGE	Jan.-March June-July	Cold frame and transplant.	One-half inch	Fifteen inches	8 to 12	2 pkts.
CANTALOUPE	May-June	Hills 4 feet apart.	One inch	Three to hill	8 to 12	1 oz.
CARROTS	Jan.-March June-July	Drills 18 to 36 inches apart.	One inch	Four inches	8 to 10	1 oz.
CAULIFLOWER	Jan.-March June-July	Cold frame and transplant.	One-half inch	Twelve inches	8 to 12	2 pkts.
CELERAIC	May-June	Drills 18 to 36 inches apart.	One-half inch	Three inches	16 to 20	1 oz.
CELERY	May-June	Cold frame and transplant.	One-half inch	Six inches	16 to 20	2 pkts.
CORN	March-May	Drills 24 to 40 inches apart.	Two inches	Twenty-four inches.	7 to 12	½ lb.
CORN SALAD	Jan.-March June-July	Drills 12 to 36 inches apart.	One-half inch	Two inches	3 to 6	1 oz.
CRESS	Jan.-March March-May	Corner of garden.	One-fourth inch	Don't thin	6 to 8	1 oz.
CUCUMBER	March-May June-July	Hills 4 feet apart.	One inch	Three to hill	10 to 12	1 oz.
EGG PLANT	May-June	Cold frame and transplant.	One-half inch	Thirty inches	10 to 12	1 pkt.
ENDIVE	Jan.-March August-Sept.	Drills 12 to 36 inches apart.	One-half inch	Six inches	3 to 6	1 oz.
KALE	Jan.-March August-Sept.	Drills 18 to 36 inches apart.	One-half inch	Eighteen inches	4 to 8	1 oz.
KOHL RABI	Jan.-March	Drills 12 to 36 inches apart.	One-half inch	Four inches	3 to 6	1 oz.
LEEK	Jan.-March August-Sept.	Drills 12 to 36 inches apart.	One-half inch	Three inches	10 to 12	2 ozs.
LETTUCE	Jan.-March August-Sept.	Cold frame and transplant.	One-half inch	Ten inches	4 to 8	1 oz.
MUSKMELON	March-May	Hills 4 feet apart.	One inch	Three to hill	10 to 12	1 oz.
MUSTARD	Any time	Drill or broadcast.	One-half inch	Don't thin	3 to 6	1 oz.
OKRA	March-May	Drills 18 to 36 inches apart.	One inch	Eighteen inches	8 to 10	2 ozs.
ONION	Jan.-March August-Sept.	Cold frame and transplant.	One-half inch	Three inches	12 to 16	1 oz.
PARSLEY	Jan.-March	Corner of garden.	One-half inch	Don't thin	8 to 12	1 oz.
PARSNIP	Jan.-March	Drills 18 to 36 inches apart.	One-half inch	Three inches	8 to 12	1 oz.
PEAS	Jan.-March Sept.-Oct.	Drills 18 to 36 inches apart.	Two inches	Don't thin	8 to 12	1 lb.
PEPPER	May-June	Hot bed and transplant.	One-half inch	Fifteen inches	12 to 16	2 pkts.
PUMPKIN	March-May	Hills 6 feet apart.	One inch	Three to hill	12 to 16	2 ozs.
RADISH	Jan.-March	Drills 12 to 36 inches apart.	One-half inch	Two inches	4 to 6	2 ozs.
SPINACH	Jan.-March August-Sept.	Drills 12 to 36 inches apart.	One inch	Four inches	6 to 8	2 ozs.
SQUASH	March-May	Hills 4 feet apart.	One inch	Three to hill	8 to 12	1 oz.
TOMATOES	Jan.-March May-June	Hot bed and transplant.	One-half inch	Thirty inches	12 to 16	1 pkt.
TURNIP	Jan.-March June-July	Drill or broadcast.	One-half inch	Four inches	8 to 12	1 oz.
WATERMELON	March-May	Hills 4 feet apart.	One inch	Three to hill	12 to 16	2 ozs.



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Selection, Preparation, and Packaging of Foods For Freezing

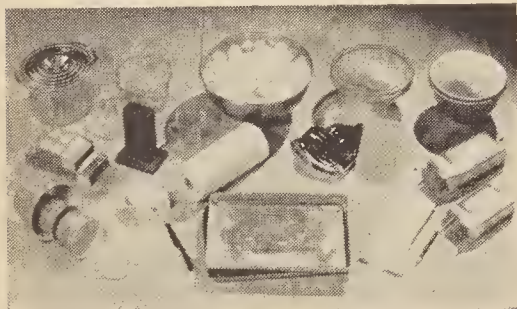
By MARY FRANCES RASBERRY

Home Service Representative, Carolina Power & Light Co.

Photographs courtesy of Westinghouse Corporation, Mansfield, Ohio

A COMPLETE company dinner from fruit cup to shortcake and all kinds of good things in between can be prepared and on the table in an hour! That's just one of the things that your new freezer or your freezer locker can do.

You must give it a chance to do its best—and to do that you should understand it. There are many things



Equipment is simple. Special items are easily obtained.

to consider—the matter of selecting the right food—preparing and packaging it properly—freezing it immediately.

The important thing to remember about freezing foods is simply this—no food is improved by freezing. What you prepare and put in your locker, with proper handling and protection, can be preserved in the same good, fresh condition in which you freeze it but it will not be improved.

It's easy to freeze foods. There is a knack to it, though. Anyone can follow directions but it takes the little extra "know-how" to make the food "company-fare." In other words, it costs very little more to go first class!

If the strawberry shortcake you make with your frozen strawberries in December tastes and looks like the strawberry shortcake in June, then your frozen strawberries are sheer perfection . . . if the lima beans or peas you freeze in summer bring to mind visions of tender green pods on

the vine when cooked and eaten in January, then they are of the best possible quality.

The extra know-how which will keep the garden-fresh colors and flavor in the frozen foods depends on five things:

- (1) Select varieties of fruits and vegetables which will lend themselves well to freezing. Intensity of color is one indication of intensity of flavor and in turn these products are better for freezing;
- (2) The foods should be selected at maturity only;
- (3) Speed from harvest to freezer is important;
- (4) Package with care;
- (5) Zero temperature for storage.

Selection

Now, for a little more about selection. Gather the fruits for freezing at the height of maturity, fully ripe and sweet. Pick only as much as you can prepare quickly, for the



Steam scald a pound of vegetables at a time.



Ice water cools vegetables quickly.

longer you hold it after gathering, the poorer it will be after freezing.

The same is true for vegetables. Let them be fresh, tender and at their best. Two hours from vine to freezer is an excellent rule to remember.

It is practical to freeze so many foods that it is easier to tell you what not to freeze. Some of them are potatoes, tomatoes, uncooked salad greens and bananas. Almost any other food can be frozen and stored: meats, vegetables, fruits, pies, rolls, cakes, and stews.

Preparation

There are three important steps in preparation of fruits and vegetables for freezing:

Vegetables must be blanched in boiling water or steam. This is done because it improves the color, saves the vitamins and stops deteriorations. Blanch only one pound of vegetables at a time; for each pound of vegetables you need about a gallon of water. This can be done either in a wire basket or in a cheese cloth for the required length of time for the particular vegetable.

Vegetables must be cooled immediately after scalding—by immersing in a large pan or sink of ice water or cubes. Oxidation, and loss of flavor and vitamins occur rapidly when vegetables are warm. After cooling, the vegetables should be drained thoroughly before packing.

Most fruits need not be scalded. Peaches may be scalded just enough

to loosen skins, and apples are scalded for 1½ to 2 minutes after having been soaked in a salt brine. Generally speaking, though, fruits are frozen with the minimum of effort. Wash thoroughly and add sugar—either dry sugar or a syrup. If dry sugar is



Press cellophane over cardboard, seal with iron.

used, the proportion of sugar to fruit is 1 lb. sugar to 4 or 5 lbs. fruit. When syrup is used, it should be prepared a day ahead of time. The fruit may be dropped directly into cold sugar—syrup containing ascorbic acid which has been added to help prevent darkening of the fruit during storage. To 2 cups of water add 1 level teaspoon of powdered ascorbic acid, stir and then add 3 cups of sugar. This

will make about 1 quart of syrup for 12 pts. of peaches. You may obtain powdered ascorbic acid from your druggist or freezer locker operator.

A great deal of research has been done along these lines and the results show that the appearance and flavor of the fruit treated with syrup to which ascorbic acid has been added is decidedly superior to that frozen in plain syrup.

Packaging

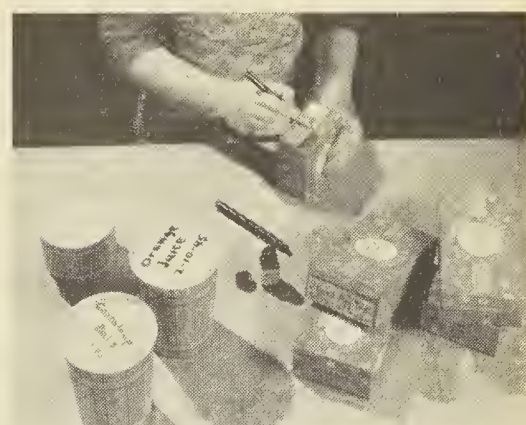
For vegetables—The cardboard carton with a heat sealing cellophane or paper liner is very satisfactory for vegetables. The liner may be sealed with an electric iron or a curling iron. Leave one-half inch head space.

For fruits—The cardboard carton with cellophane liner is not as satisfactory for fruits with syrups because if the top of the liner gets damp it will not seal properly; therefore, to be on the safe side the regular waxed cardboard tub with slid-in lid is recommended. This type is shown in the illustration. Leave three-fourths inch head space.

For meats—Meat and poultry should be prepared as you would for cooking immediately and then snugly wrapped. An excellent wrap is a sheet of heavy cellophane; over that

wrap heavy aluminum foil, pressed firmly to the meat. Cellophane plus stockinette is also a good wrap.

Mark all containers clearly, indicating kind of produce, date of packing and your locker number. Wax crayon is satisfactory for marking.



Label packages with a china marking pencil or marking ink.

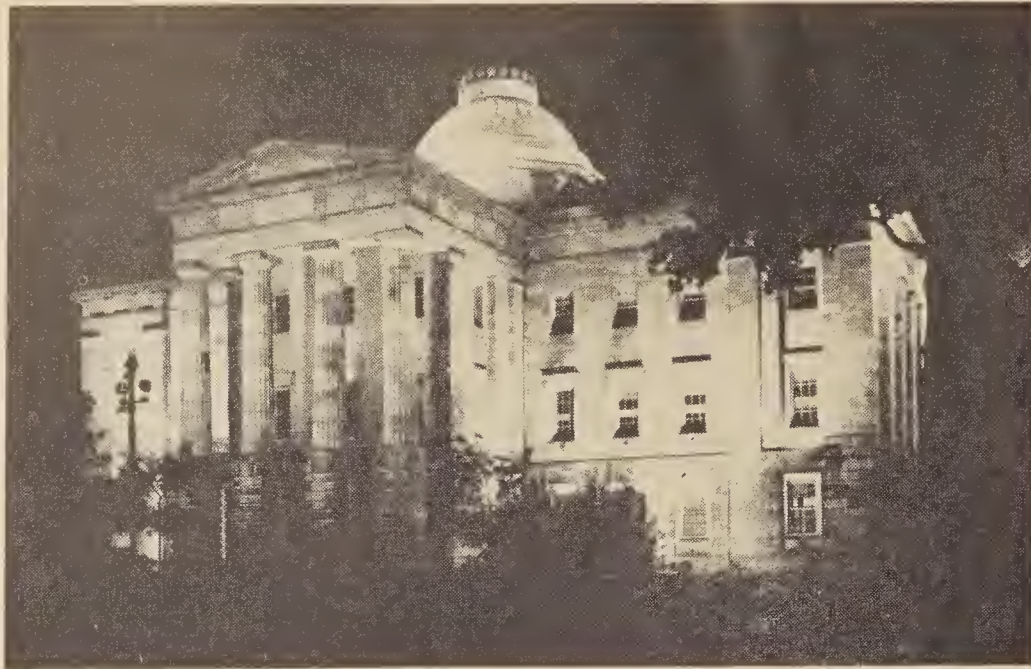
Freezing of the foods should follow immediately after packaging. If it is impossible to go to the locker at once you may store your cartons in the refrigerator for a short time.

If the above directions are followed with care, then you'll be able to whip up that company dinner made up of frozen foods in short order and your guests won't be able to guess the difference!

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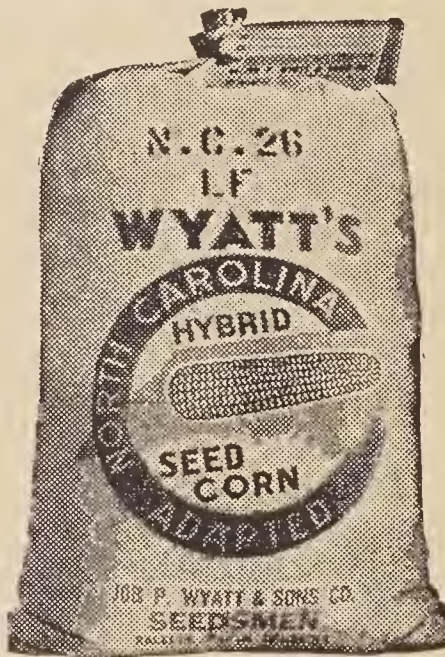


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Sheep Never Fleece You

By ROBERT S. CURTIS

North Carolina Department of Agriculture, Raleigh, N. C.

The market on sheep has soared. Recently 2,000 head of 90 pound lambs sold on the Denver market for \$27.75 per hundred weight. This is not a normal situation but due to the scarcity of slaughter animals, hogs particularly, and other food products doubtless prices, even after leveling out, will be substantial and profitable to the sheep grower. Coupled with this is the fact that sheep always pay under good care and management. There is an incentive to stay in the sheep business. Don't be frightened by fluctuations.

The number of sheep in the United States has changed widely from a low of about 37,000,000 in 1923 to a high of about 47,000,000 on January 1, 1942. This latter figure is the highest number on record and was two years before the peak of cattle numbers. Beginning with 1942, sheep numbers have declined sharply.

Conspicuous features are the long-term and irregular fluctuations. Because of these, no clearly defined trend can be discerned. If earlier records are examined, however, it is found that in the twenty years before 1900 fluctuations occurred quite similar to those which have taken place since, and that the general level prevailing between 1930 and 1940 was only slightly higher than that reached in 1910. This indicates that during the last 65 years there has been no significant upward trend in sheep numbers.

Sheep and lambs, after reaching a stage of maturity on the ranges, are given a short period of intensive feeding on Corn Belt or eastern farms before being slaughtered. The number of feeders represents but a very small percentage of the total number of sheep, but figures show that feeding has a rather definite place in the farm economy which it maintains with a considerable degree of stability regardless of temporary changes in economic conditions.

In seeking causes for the changes in sheep numbers, it will be noted that a major decline began during 1911 and proceeded with only a minor interruption in 1918-1919 until 1923. Possibly the economic conditions at the time had some influence in checking the rise, but they did not result in any material decline. Even the drought of 1934 had little influence, and for several years the number remained as high as or higher than in 1909-1911. Although the numbers of sheep rose during the early years of World War II, the movement was not continued and has in fact been reversed, notwithstanding the very great rise in national income and prices.



Sheep-raising always pays a profit under good care and management.

A comparison in sheep numbers showing the income of the non-farm population leads to the conclusion that sheep numbers are governed by conditions that are not clearly related to the demand for mutton and lamb. Nevertheless North Carolina can produce profitably far greater numbers of sheep than our present number of 50,000 head. Markets are available both within and without the State.

Yes, breeding ewes are scarce due to the high prices paid for ewes which might have breed on for one to three years. This means good care for those remaining in the breeding fold. Now is the time to look ahead and plan to save more of the good ewe lambs next year. Too many have been

sacrificed and consequently sheepmen are caught "holding the bag." This should and can be righted. Look ahead.

Prices will level out; but, considering all factors, the need will keep them in the substantial column. Some counties in North Carolina could support one half the number of sheep now grown throughout the entire State. A few sheep on many farms in a good rule to follow.

Even in the lower brackets, prices are substantial and growers should make plans for more and even better lambs next year. Livestock keeps growers in the "saddle" but that is the way livestock pays. "In and outers" rarely ever profit. Sheep are sure.

Saving the Spring Pig Crop

New pigs will soon be arriving and now is the time to discuss the spring pig crop. Farrowing time is certainly the swine producer's harvest time. No other period will so greatly affect his profits.

All of the precautions and rules of saving the fall pigs will largely apply now. In addition, however, there are certain other items that are essential for spring pigs. For example, the weather is much colder than when the fall pigs were born in August and September. This means that housing conditions will have to be much warmer and drier and offer more protection from the wind. Nutritional deficiencies are also far more likely to be serious at this season than in the fall. Green pastures were easily available then and in addition the sows had a good storage in their bodies of many of the essential nutrients. This was especially true in case of the vitamins of which green pastures are a splendid source.

It is very important that the sows be wintered properly for "an ounce of prevention is worth a pound of cure." Feeding the bred sow a good balanced ration and having her in the proper condition (strong and thrifty but not too fat and not too poor) will go far toward preventing many difficulties at farrowing and



Carolina Dairy and



during the nursing period. Wheat, barley, rye, oats, crimson clover and rye grass are all good for pasture. Now is the time to take advantage of such pasture.

Farrowing

A few days before a sow is due to farrow she should be separated from the other hogs and moved to warm, clean, dry, well-bedded quarters. Even though the weather has been cold, all sanitary precautions for caring for the sow and farrowing quarters should be followed. The guard rails "pig savers" should be checked or installed if they are not already part of the standard equipment. Extra precaution to have the farrowing house warm, well-bedded and the sow protected from cold drafts is worth while. If the weather is cold it may even be necessary to hang burlap in the inside of the farrowing quarters to provide extra warmth for the new-born pigs.

The heavy concentrate feed, like corn, should be reduced slightly a few days before the sow is to farrow. Wheat bran fed at this time adds bulk and laxativeness to the ration. If no green pasture is available or has been for some time, bright green leafy legume hay kept accessible to the sows will supply much-needed vitamins, especially A and D.

It is even more important for the attendant to be on hand at this season when the sow farrows, or at least soon afterwards, than in warm weather. This is a critical time in the pigs' lives and frequently a little extra care soon after birth will save the lives of many pigs that would otherwise die. This is especially true in cold weather, for young pigs are easily chilled and either soon die or

EDITOR'S NOTE—This is the second of a series of articles on livestock sponsored by Lancaster's Stockyards, Rocky Mount, N. C.

become weak. The attendant can easily prevent this loss by providing warm quarters and if necessary warming the pigs. A covered box or basket lined with sacks and containing hot bricks or jug of hot water thoroughly wrapped and placed in the center is practical for this purpose. Be sure that the weak pigs have a chance to nurse.

The sow should not have any concentrate feed the first day but should have access to plenty of clean, fresh water. Start feeding the sow again on the second or third day after farrowing and increase the feed gradually so that she will be on a full feed in about a week. The nursing ration is corn 60%, wheat shorts 25%, and a mixture of equal parts of cottonseed meal and fish meal 15%. They will also need a mineral mixture similar to the one we gave you.

Don't forget that if the pigs are to grow fast they must get plenty of milk, and the best way to insure this is to feed the sow well. These are the pigs that you will be sending to a good market next fall, so keep them healthy and growing rapidly.

CARE OF THE BEEF HERD BULL

With the spring beef calves being born and the extra care being given the nursing and pregnant cows, many farmers are apt to neglect their herd bulls. This is a serious mistake, for is he not half

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J. T. WOOTEN, Manager

Livestock Section..



the herd and won't the breeding season be starting in a few months?

Look over your bull and examine him carefully now. Is he in a rather poor, run-down condition? If so, you should start immediately to get him in the proper condition and state of health for breeding. If he is a young bull you should feed him sufficiently well so that he will continue to grow and fatten at the same time. If he is an old one, fattening up will be all that is needed. Or a young mature bull may not need anything other than to keep him in the proper condition until breeding season.

We do not mean that herd bulls should be in high or show condition at the start of the breeding season, or that they should be fat like prime steers. They should, however, be in a good, strong, thrifty condition and carrying some fat for a reserve to help tide them over the breeding season. Many bulls, either through heavy service, old age, immaturity, poor pastures or a combination of these factors, come out of the breeding season and enter the winter in a poor, run-down condition. If this condition is not corrected before the breeding season starts, a poor calf crop the following year is apt to occur.

Agricultural colleges, experiment stations and animal breeders know that when an animal is in an undernourished or poor state of nutrition, its breeding ability is impaired. Carefully conducted surveys of range bulls showed that the ranchers who conditioned their bulls before the breeding season raised a considerably higher percentage of calves than those that did not. This same difference would no doubt apply right here in our own eastern North Carolina. The importance of wintering the herd bull so as to be

in the proper condition for the breeding season next spring is now recognized by all good beef cattlemen. It is really one of the things you can't afford to neglect.

Conditioning for the Breeding Season

The amount to feed in order to have a bull in the proper condition at the start of the breeding season, about the first of May, will depend on a number of factors. The age of the bull, his present condition, the number of cows in his herd the past and coming season, his individuality, the quality of feeds and the length of time until he will be in heavy service are the most important of these factors.

Young growing bulls and those so old that they are failing in health will require more and better feeds than mature ones. The more cows a bull served last season, everything else being equal, the poorer the condition he went into the winter. Likewise, the more cows to be bred next season, the more important it is that he be put in rather good condition this winter. Some bulls are "easier keepers" than others and are much less likely to get poor, although individuals that are too hard to keep fat should not be used as bulls. Of course, the better the quality of feed, the less needed; and the longer the time available before the bull will be needed for service, the easier to get him in proper condition.

Young bulls should be well fed and cared for if they are to be grown out properly. That good winter pasture that you should have put in last fall will now be excellent for helping to condition the bull for service. It provides exercise, saves much harvested feed and is rich in vitamins and minerals. Good quality roughage, especially legume hay, will

greatly reduce the amount of concentrates needed. A good grain ration consists of equal parts by weight of crushed corn, crushed oats and wheat bran. If the roughage is not legume hay, add about one-half pound of cottonseed meal or soybean oil meal to the mixture daily or replace one pound of the bran with the protein supplement. The amount of concentrates to feed should vary with the condition of the bull but should not exceed one pound for each one hundred pounds live weight of the animal. Give him access to salt, fresh water, and a good mineral mixture. An open but dry well-bedded shelter should also be provided.

If the above precautions are followed, you will go far towards insuring a good calf crop for next season.

SELECTING GILTS FOR THE SPRING HERD

Feeding and caring for brood sows and pigs for the market are very important. However, no matter how good the feed and care, the best results cannot be obtained unless good breeding animals are also used. Since many of you now have fall pigs in the feed lots, it is an excellent time to select those gilts you need to add to your herd, either for replacing undesirable sows or for increasing the size of your herd.

Selection

In selecting gilts, type is of utmost importance regardless of whether the selection is for the production of breeding stock or slaughter hogs. Only those should be selected that possess the type and conformation that fulfills the requirements of the market at which their offspring will be sold. Of course, only strong, thrifty individuals that are well grown for their age should be selected. In addition, they should be as uniform as possible in type, quality, size and breed. Only when this is the case can the greatest benefit be derived from the use of a good boar. If the sows are uniform, a boar can be used that is exceptionally strong where they are weak and thus to a great extent overcome in the offspring

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the faults of their dams. For example, if the gilts are good individuals, but of a little smaller, more refined type than the most desired, then an oversized rugged boar can be selected to mate with them.

The size of litters, number of pigs raised, and rate and efficiency of gains are of great importance. Special effort should be made to select gilts from lines of breeding that possess these necessary qualifications and they themselves should have made rapid and efficient gains since birth.

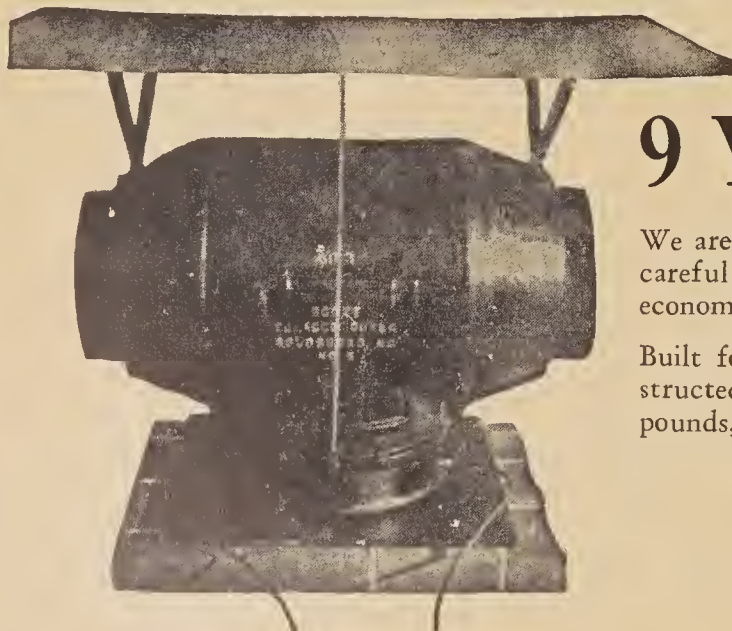
Type

The intermediate type sows are at the present time the most popular and will usually be the most profitable ones to keep. This type has good length body, medium length legs and large but not too coarse bones. To insure constitutional vigor and good feeding qualities, they should also have good depth and capacity of chest and middle. These sows usually produce large litters and are good milkers. When bred to the right kind of boars their pigs make rapid and economical gains and yield the most desirable carcasses. The more extreme types are not as satisfactory in these respects. For

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LIVESTOCK SHOWS AND SALES—1947

Aberdeen-Angus Sale, Elkin, N. C., March 12.

Rocky Mount Fat Stock Show and Sale, April 2 and 3.

Kinston Fat Stock Show and Sale, April 9 and 10.

N. C. Hereford Breeders Show and Sale, Statesville, April 14 and 15.

Raleigh Fat Stock Show and Sale, April 17 and 18.

Smithfield Fat Stock Show and Sale, April 24 and 25.

Asheville Bull Sale, April 25.

Durham Fat Stock Show and Sale, April 29 and 30.

Lumberton Fat Stock Show and Sale, May 1.

Elizabeth City Fat Stock Show and Sale, May 7 and 8.

Williamston Fat Stock Show and Sale, May 9.

Statesville Fat Stock Show and Sale, Last of May or First of June.

Greensboro Fat Stock Show and Sale, Some Time in June.

example, the small or "chuffy" type are finished when too light in weight to be economical feeders. On the other hand, the rangy type must be carried to heavy weights in order for them to be fat enough to produce choice carcasses.

Regardless of the kind, the gilts selected for the breeding herd should have well developed udders with at least six teats on each side, bright clear eyes, with good width between them, and medium sized ears that will not obstruct the sight. Strong, mediumly-arched backs, deep long smooth sides and deep, wide plump hams are desirable. Straight strong legs, well placed under their body, good feet and short strong pasterns are also important.

It is usually difficult to tell much about the disposition of a young gilt but the disposition of a sow is very important. A cross, nervous or irritable one is dif-

ficult to handle and will often injure her pigs.

It is generally best not to select the gilts until they are five to six months old, but if they are to be chosen from the pigs in the feed lot, they should be selected before they get too fat. They can then be changed to a developing rather than a fattening ration. A few extras should be retained when this is the case so any that do not continue to develop satisfactorily can be discarded and fattened for the market.

Remember the function of a brood sow is to produce profitable pigs. The cost of keeping her is approximately the same regardless of the number and kind of pigs she raises. Therefore, the more good thrifty pigs she weans, the more profitable she will be.

COUNCIL IN THE FEED LOTS

Those pigs or beef cattle that you or your friend started on feed last fall will soon be ready for market. Have they been making good gains? Have their gains been economical and efficient? How is their feed supply holding out? Has a good place to market them been selected? These are some of the many questions

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We still have some territory open for dealers.

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GOLDSBORO, N. C.

Coastal Plain Fat Stock Show — April 9-10, 1947

The seventh annual Coastal Plain Fat Stock Show and Sale, sponsored by the agricultural committee of the Kinston Chamber of Commerce, will be held in the New Dixie Warehouse in Kinston, April 9-10, it was announced by F. Joe Koonce, county agent and a member of Chairman B. Cameron Langston's agriculture committee.

Entries from at least 10 counties are expected, with more swine exhibits than were offered last spring, with perhaps fewer beeves. In the 1946 show there were 207 beeves, including the champion exhibited by Wayne Raimor of Selma, which sold for \$839, or 77 cents per pound.

that confront the livestock feeders at this time.

Frequently even those beef cattle and pigs that have been making good gains since last fall will "slow up" at this season. There are a number of things that may cause this decrease in rate of gain. They may be about finished or fat enough, and the gains always "slow up" when an animal gets very fat. This is especially true in case of cattle. They may have grown tired of the feed and consequently are not consuming enough of it to produce rapid gains. Often a slight increase in the protein content of the ration will correct this difficulty. For example, hogs on a straight corn diet not only fail to make good or economical gains but soon tire of their feed. Even when they are getting enough protein to balance the ration, they may tire of it before the end of the feeding period. The addition of a small amount of fish meal, tankage, cottonseed meal, soybean oil meal or peanut oil meal at this time acts as an appetizer and increases the daily feed consumption. In case of cattle the addition of one or two pounds of one of the oil meals per head daily will increase the feed consumption so that the rate of gain can be improved.

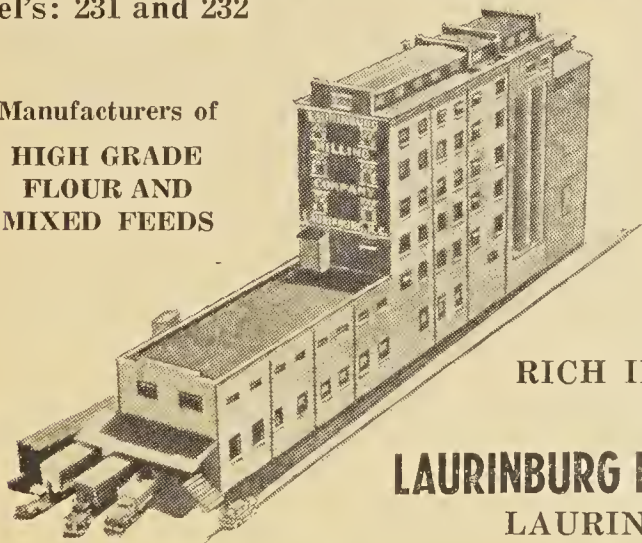
Cattle may go completely "off feed" and cease to gain or even lose weight. If this condition is not soon corrected, little profit or even a financial loss may result from the feeding operation. In case of animals going "off feed" the first thing to do is to reduce their feed at

once and then find the cause and correct it. It may have been due to over-feeding, irregular feeding either in amounts or time of giving it, filthy troughs, poor quality feeds or moldy or damaged feeds. After the ration has been reduced and the cause removed, then gradually increase the amounts offered daily until the animals are on a full feed again. The length of time required to get them back on full feed will depend on how bad they were "off feed" and the cause. Usually about two weeks is required if the trouble is corrected in time. Remember, though, it is much better to prevent the trouble than to have to correct it once it has developed. Careful, frequent inspections of the ration and the animals at feeding time will usually make it possible to prevent their going off feed. If the animals start leaving appreciable amounts of their feed or do not appear hungry at feeding time, that feed should be reduced to where they will clean it up, and also inspected for quality. A close observer can frequently tell by the manner when the animals are about to go off feed. The old Scotch axiom, "The eye of the master fatteneth his cattle" is a true one.

If some of your animals are not doing as well as most of the other ones in the same lot, it may be that your feeding troughs are crowded and the smaller or more timid ones are being pushed away from the feed. A supply of fresh water goes a long way toward preventing feeding troubles.

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Meat Grading

(Continued from Page 7)

U. S. Utility—The lean meat is light to very dark red and rarely shows any marbling. The very thin fat covering varies from grayish white to decidedly yellow. Much of the beef of this grade is produced from animals quite advanced in age. This grade is relatively low in price and, like the Commercial grade, should be used for dishes which require long, slow, moist cooking. Similar characteristics are exhibited by the various grades of veal, lamb, and mutton.

Graders Are Experts

Official U. S. meat graders are trained experts who have had at least six years of responsible experience in the grading, buying, or selling of meat in large wholesale quantities before they are eligible to become Government meat graders. In addition, they must pass satisfactorily a 12-month probationary period. These stiff qualifications are designed to insure a uniform application of the grade standards.

Service charge for grading is \$2.70 an hour. This charge makes the service self-supporting. On the average, about 50 beef carcasses can be graded in an hour. The cost averages about three-hundredths of a cent per pound. That cost of grading is too small to make a difference in the cost of meat to consumers.

Graders are available at all of the principal livestock slaughtering and dressed meat-marketing centers of the United States.

They are subject to call every week day by packers, wholesalers, retailers, or others who have a financial interest in the meat. Your dealer can get graded meat for you if you ask him to.

Prefer Graded Meat

A nation-wide survey of consumer opinion conducted by the American Home Economics Association showed how women feel about quality grades.

The majority of the first 4,000 women to express an opinion said they would like all meat, including pork and poultry, cared for and handled under clean, sanitary conditions, and clearly marked with the Government quality grade.

Preferences expressed, in addition to grading, were for more boned meats and more small cuts. They also voiced a desire for standardized meat cutting practices over the entire country.

TOBACCO RESEARCH

(Continued from Page 6)

to accomplish these results, the combustion chamber must give good efficiency, the heat must be uniformly distributed throughout the tobacco and the heat must be kept in the barn until its work of removing the moisture from the leaves is completed.

Research in curing tobacco at the Oxford Station is directed towards the end of better tobacco cured at a lower cost. Two tobacco barns are used to determine the effects of changes in ventilation, distribution of heat and heat insulation in tobacco barns. After some experimental work, two tobacco barns were operated simultaneously. Both barns were new, alike, and well built with similar heating systems. No changes were made on one of the barns. The other one was changed to conform to some of the things which had been shown by the experiments to result in fuel saving; that is, better heat distribution, more accurately controlled ventilation and heat insulation.

Tobacco leaves as much alike as possible were placed in the two barns in equal quantity. One barn required 1989 pounds of coal and 107 7/12 hours to cure the tobacco. The other barn required 820 pounds of coal and 95 11/12 hours to cure the same amount of tobacco.

If this difference were made possible for the 250,000 tobacco barns in North Carolina, assuming that each

barn is used four times during each year, the saving in fuel would be equivalent to 584,500 tons of coal. At \$10 per ton, this would represent \$5,845,000 as a fuel saving to the State in one year.

The saving in time is 11 2/3 hours for each cure for the 1,000,000 cures made in the State in one year. Over 10,000,000 hours would be saved for the tobacco barns. If 100 hours are required to cure the tobacco, this saving would be equivalent to 100,000 tobacco barns. At \$1,000 each, these experiments could result in a further saving of \$100,000,000. If the life of a tobacco barn is 20 years, this would give an annual saving of barns of \$5,000,000. Add this to the fuel saving and the result is \$10,845,000—just pocket change for tobacco growers!

Washburn Company Offers Rubber-Coated Baskets For Farm Products

Rubber-coated Farm Baskets for handling and harvesting potatoes and other vegetables and fruits are again available, it was announced by the Washburn Company, Rockford, Illinois. Shipments of this item will resume in March.

The black rubber coating prevents costly bruising of garden produce and will withstand potash and other chemicals used in dipping potatoes. Lightweight, sturdy



wire construction permits quick, efficient handling of all types of crops and also prevents dirt and debris from collecting as in other baskets.

The 5/8 bushel capacity is a convenient size, for when filled with produce, women and young men can handle them easily. All baskets are made of high tensile strength wire for long, durable, hard use and are equipped with easy to use, comfortable handles.

EL MORO

A Good Cigar

TURKISH TOBACCO

(Continued from Page 9)

air from moist materials nearby, such as green hay or fodder, uncured tobacco, drying forage, or manure, is disastrous.

It takes about six to twelve days for tobacco to cure in the sun, and at that, the racks must be placed on white or light-colored surfaces such as white sand, cement, or white-washed boards, which reflect both light and heat.

In special barns constructed for storage, the sticks are placed on storage racks. There must be windows or doors on the sides or ends, permitting air to circulate freely. The tobacco should not be stored closer than two feet of the floor. It is then bulked down to prepare it for baling. At this time, it should be dry enough to rattle, yet not dry enough to crumble or break to pieces. It is baled for delivery to the buyers by a specially constructed press, and covered with burlap or Hessian cloth for further protection. Turkish tobacco brings a substantially higher price per pound than domestic tobacco.

An interesting revelation of the cooperative research program has been the demonstration that it is not necessary to import fresh seed from the European growing regions each year for planting in this country. Much of the labor can be done by women and children who are accustomed to work, the growing crop requiring very little weeding or cultivation. It has been demonstrated since 1944 that production in small plots of one to two acres or less is most desirable, and that the small farms in the upper Piedmont regions of the Eastern slope of the Blue Ridge from Virginia to South Carolina are considered to be the most favorable sites for growing this type of tobacco. They produce from 1,000 to 1,200 pounds of good quality tobacco per acre.

The economic situation over the past twenty years has operated to make these small farms more and more marginal and to deprive their owners of their normal sources of cash income. An increasing preference by American smokers for lighter eastern flue-cured types of tobacco has reduced the demand for the heavier types formerly grown on the farms of the western Piedmont in Virginia so that a new cash crop is now badly needed as a source of income in that area. Due to his higher production costs, the same situation prevails for the small cotton farmer in western South Carolina.

A second factor of economic importance and significance is that these

tobaccos thrive better with organic types of fertilizer than with artificial fertilizers, such as are commonly used for flue-cured tobacco production. The widespread introduction of such a profitable crop as Turkish tobacco to these farms would require the production of more animal manures and thereby encourage the keeping of livestock. A more balanced agriculture on these farms would result.

In the autumn of 1944 the cooperative arrangement worked out by Duke University with the Agricultural Extension Services of the states of North Carolina, South Carolina, and Virginia made it possible for extension specialists in tobacco to be placed in selected and restricted areas to give the growers daily supervision and instruction where needed. In 1945 a total of 58 farmers produced 16,489 pounds, or an average of 1,249 pounds, at 75 cents per pound.

In 1946 a total of 81 farmers grew 22.7 acres of tobacco, producing 26,023 pounds or an average yield per acre of 1,146 pounds. In 1947, there will be approximately 140 growers, planting 45 acres.

The present experiments in the growth of Turkish tobacco, so far as it is known, are the first to be con-

ducted on a broad scientific basis. The 1946 crop is much improved over that of 1945. The correlation of laboratory and field work was done under the direction of Dr. Darkis, and much of the success of the program as a whole may be attributed to the findings of his experiments.

Maupin Announces 1947 Poultry Contest

State and regional prizes will be awarded to winners of this year's "Chicken of Tomorrow" Contest which will be climaxed with a dressed poultry show the week of June 16-21, it was announced this week by C. J. Maupin, state chairman, and poultry specialist for the State College Extension Service.

Outstanding entries from each of the twelve states grouped in the southeast section will compete in a regional dressed bird show to be held in Georgia, June 23-28, Maupin said. This region includes Tennessee, West Virginia, Virginia, Kentucky, Maryland, South Carolina, Georgia, Alabama, Florida, Mississippi, and North Carolina.

"There is still plenty of time," Maupin said, "for any breeder, hatcheryman, or flock owner interested in improving meat quality to enter this contest and become eligible for both state and regional prizes." Contest rules call for a minimum of fifty chicks hatched from March 24 to 28, 1947.

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See Your Dealer

Producing Plants

The time for bedding sweet potato seed is almost now at hand. Plans for the production of plants should be made now in order to produce early plants which in turn will produce early vine cuttings for the main crop which is necessary for high yields of good quality potatoes in the fall. Therefore, you are urged to begin now on the construction or renewal of your plant bed to meet this objective.

Good Seed: It is imperative that each of us recognize that our sweet potato industry is a highly competitive business between ourselves and with other producing sections and to met this competition each of us must strive to produce only high quality potatoes for the market. In this endeavor we must recognize that the quality of the crop we harvest next fall is definitely limited to the quality of the seed we plant this spring. If you need improved seed see your dealer, your county agent, or write the Council Secretary immediately.

Types of Beds: Types of beds recommended in order of their preference when all factors are considered are: electric heated; tile-type flue heated, pole-type fire heated, and "root patch" or field bed-



ded potatoes. Materials for electrically heated beds should be easier to secure this season. The tile-type bed has been used with very satisfactory results for the past several years. If you need plans for this or other beds they can be secured from your county agent or from North Carolina State or Clemson Colleges.

Bed Management: While bed management may vary to some extent with the several types, the following general practices are recommended to be followed:

Bed only high quality seed with deep outside and inside color. Use seedstock 1½ inches in diameter to U. S. No. 1 size, as the larger seed produce more vigorous plants and larger yields.

Treat all seed prior to planting as directed below:

Know the temperature of your bed by using a reliable soil thermometer, keeping the temperature from 80 to 85 degrees. Water should be supplied to the beds as needed during the middle of the day, which is usually once or twice per week, until the sprouts appear and then more often.

On warm days the cover should be removed to toughen the plants, but should be replaced on cool nights. Several days before each pulling the heat should be

withdrawn and the cover removed and water withheld until several hours before pulling, when the bed should be thoroughly watered.

If a previously used bed is to be used the upper layer of soil should be replaced and the walls disinfected for the control of diseases.

Seed Treatment: There are several materials which are satisfactory for treating sweet potato seed for controlling seed borne diseases. Probably the two most popular and equally satisfactory are Borax and Semesan Bel.

In using the Borax treatment, dissolve 6 pounds of borax in 30 gallons of water. Dip the seed in this solution allowing them to remain in the solution for 10 minutes. In treating large lots of seed, it will be found necessary to replenish the solution from time to time, using the same strength for the new supply.

If Semesan Bel or other material is to be used, the manufacturer's recommendations should be carefully followed.

Your dealer and county agent can assist you in securing more detailed information on the several types of hot-beds and their management.

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As a Grower and Plant Distributor, I urge farmers to secure the best Seed or Plants available for better Sweet Potato crops.

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Murray & Price Equip. Co. Mt. Olive
S. Peirson Co. Enfield
Purdie Equipment Co. Dunn
Piedmont Farm Equip. Co. Greensboro

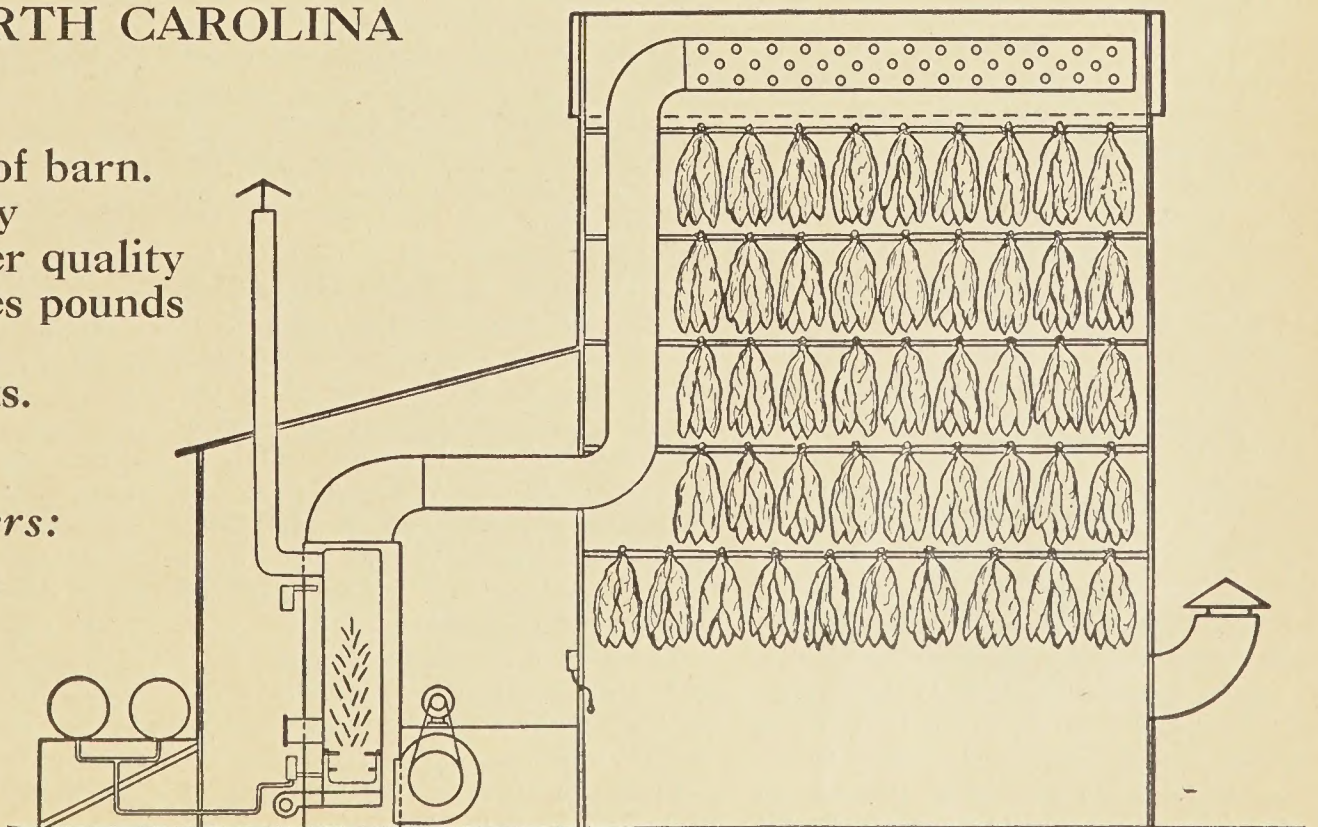
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ACROSS THE EDITOR'S DESK

Yield, Potato, Yield

That's just what they do. And do we realize fully the potential value of the sweet potato even for food, for feed. Booker T. Washington found them greatly more in potential value. Frequently we find things at our doorstep, things we fail to appreciate and therefore fail in realizing their real worth. This is to say that sweet potatoes are a crop and a very real one with potentialities waiting to be used.

Recent statistics in acreage production of sweet potatoes show that Louisiana ranks first, Georgia second, and North Carolina third. In yield, however, while Louisiana still ranks first with a 10,800,000 bushel crop, North Carolina comes in second with a yield of 7,680,000 and Georgia third with a yield of 7,020,000 bushels. In addition, Texas and South Carolina rank high in acreage and production. We must admit frankly there is a promising future for the crop if volume speaks.

Are we making the most now of the possibilities in store? Probably not; in fact, far from it. Much that comes to the farmer from any commodity is in proper use of the basic or what we think of as the marketable product. By-products too often are neglected. Enhanced returns will or should come first from growing the proper variety of potatoes, and in having them placed on the market properly graded and packaged. This is where too many of us fail to realize fully from many commodities. There is much to learn and much to do. No better start could be made than with sweet potatoes with which most farmers are familiar.

Morrison, a national authority on feeds and feeding states their feeding value, that is digestible nutrients, is about one third the value of corn. On the average 5 pounds of sweet potatoes are about equal to one pound of corn. He further states that sweet potatoes are exceptionally high in dry matter for a root crop, averaging 31 per cent dry matter and naturally they are rich in starch. This still does not cover their field of worth for food and feed for in Vitamin A they rank 2 plus; in Vitamin B, 1 plus; and in Vitamin C, 3 plus. This is a substantial vitamin content, bringing them into both the food and feed picture without apology.

With dehydration plants in the making, there should be no limitation in their use. Sweet potato curing and storage houses are no longer an experiment. Swine glean the strings in the field, they can be fed

to both beef and dairy cattle, and they can make up as much as one half the ration for horses and mules. Every product, every by-product has a use. We can make much more on them as a cash crop under proper growing and marketing. We should make more from such a promising crop. It's up to us if we do. The opportunities are here and waiting.

LAUDABLE

A movement now under way and long needed is public support for the efforts of the North Carolina Meat Dealers and Processors Association to revolutionize the killing and processing of meats killed in the State and offered to the public. A "Good Health Program" is now well under way and certainly the kind and quality of meat we eat is a definite part of this program. All industries have their beginning, and probably the killing of livestock for meat had as its beginning facilities a limb on an oak tree. That was well at the time but times have changed; our population is greater, livestock are more subject to disease, and we are prone in these hurried times to take or purchase what is offered us. Conditions, however, now demand more attention to livestock slaughtered and offered for sale to the public.

Leaders in the newly organized Meat Dealers and Processors Association are hopeful for some provision whereby animals for slaughter purposes may be inspected; greater attention given to sanitary conditions in abattoirs and slaughter houses; and, in due time, that some substantial and acceptable system of grading meats may be inaugurated. These are all laudable objectives, and the public should give wholehearted support to such a move. Doubtless they will for we are now far more conscious concerning the quality of all foods eaten.

The most accurate figures available indicate that North Carolina produces about one half the beef needed to supply consumer needs. The remaining must be imported either as live animals or in the dressed meat form. This is far from a healthy condition both economically and from the standpoint of health. Now that leading abattoir operators are sufficiently far-sighted to recognize and want these better conditions, they should have full support from the public.

Once such a movement is under way, there will doubtless be a definite swing for these better conditions, both from the venders and consumers. These are far reaching objectives, laudable without doubt, emphatically indicating that we

are on the upward move for better health and living conditions. We can and should all work to their eventual attainment. Let's support those who are trying to furnish us with meat from healthy animals, meat with better quality, and meat sold on its merits.

1947 Flue-Cured Tobacco Quota Increased

Acting Secretary of Agriculture N. E. Dodd has announced that the 1947 national marketing quota of flue-cured tobacco proclaimed on July 1, 1946, has been increased 10 per cent.

In terms of acreage, the increase will provide total allotments of about 1,250,000 acres for the 1947 crop. This compares with 1946 allotments of 1,257,000.

If farmers plant about the same proportion of their allotted acreages in 1947 as in 1946, and if yields are equal to the average for the five years 1942-46, a crop of about 1235 million pounds can be expected; if 1947 yields per acre should equal the high record of 1946, the crop would be about 1315 million pounds; if 1947 yields equal the lowest figure during the past five years, the crop would be approximately 1100 million pounds. Flue-cured tobacco production in 1946 is estimated at 1322 million pounds.

Under the new proclamation, 1947 allotments for individual farms will be approximately three per cent less than 1946 allotments, although there may be some farms with acreage adjustments slightly greater or less than this three per cent figure. Definite allotment notices for farms other than new tobacco farms are expected to be mailed to farmers within about two weeks. Between two and three per cent of the total allotment will be used for increasing allotments for small farms, for adjusting allotments for other old farms and for establishing allotments for new tobacco farms.

The increased quota was proclaimed primarily to provide tobacco for export to foreign countries. During the war, countries which could not import U. S. flue-cured tobacco exhausted their stocks. Other countries, which continued to obtain supplies, were forced to reduce their stocks far below normal levels. Flue-cured tobacco comprises the bulk of the U. S. tobacco export trade and during the first 11 months of 1946 amounted to 565,000,000 pounds (farm weight basis). Annual domestic consumption of flue-cured tobacco has averaged approximately 660,000,000 pounds during the past three years.



"QUONSET" (40' x 50' with side wall door and brick front) Adapted to Seed Store—Owned by Mr. C. R. Ammons, Lillington, N. C., County Farm Agent for Harnett County.

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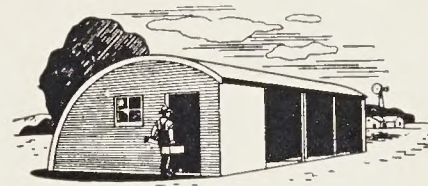
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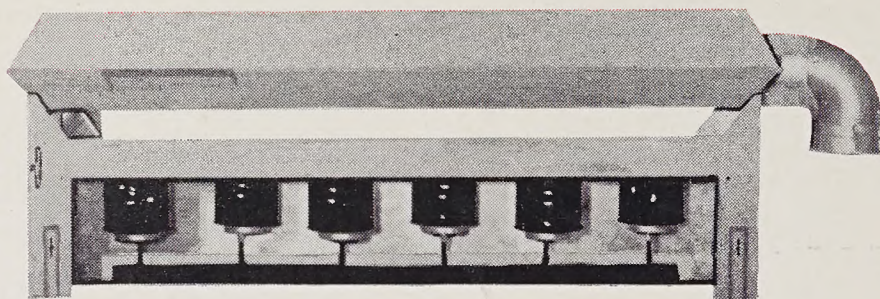
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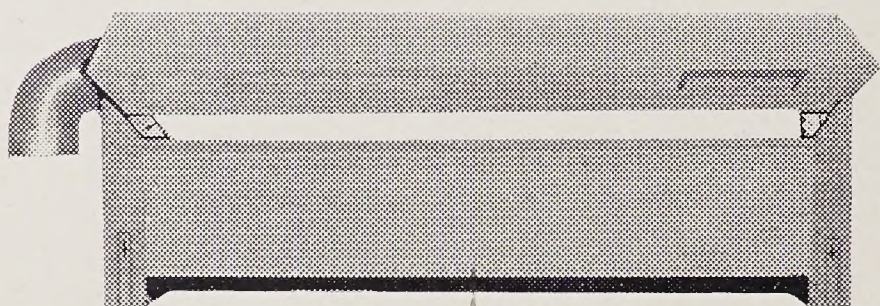
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